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CONTENTS.

CLINICS.

HOSPITAL NOTES AND GLEANINGS.

Removal of a Patella from an Excised Knee-Joint.—On the 13th of February Mr. FERGUSSON performed an operation at King's College Hospital, which was of considerable interest, in connection with excision of joints. About fifteen weeks since, he excised the knee-joint of a man for very extensive and long-standing disease of the articulation. The man made excellent progress within a very few weeks, and to all appearance a very serviceable limb was likely to be soon obtained. During the last few weeks, however, it would appear that reparation has ceased, and that Nature had failed to form a bony union between the cut surfaces of the bones. The external wound had healed admirably, but latterly considerable annoyance had been caused by the formation of abscesses in the soft tissues around the patella, which had been allowed to remain at the time of the operation. These abscesses refused to heal, notwithstanding every method had been used to forward their obliteration. The patella was freely movable, and it appeared to be floating in a bed of pulpy degenerative tissue, which is so frequently found to exist in diseased conditions of the joint. The patient having been placed under chloroform, an incision was made by the side of the patella, and, finding on examination with the finger that the under surface of the bone was in a state of ulceration, it was deemed advisable to remove it, with as much of the altered tissue as possible. The limb was again placed upon a splint, and the patient is in a very

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fair way of making a perfect recovery with a useful limb.

Mr. Fergusson made some very pertinent remarks upon the proceeding which he had just put in practice. From what he had learned of the various steps of the operation of excision of the knee-joint, he was now an advocate for the removal of the patella, even when healthy, as it was liable to give subsequent annoyance. Mr. Jones, of Jersey, had in a most praiseworthy manner exerted his skill on many occasions to save the cap-bone with its ligature entire, and had frequently succeeded; but he (Mr. Fergusson) would for the future take away the bone, provided it was not bound to the condyles of the femur by osseous material. He had been the more induced to follow this proceeding of removing the patella, owing to the great benefit which resulted from the practice in one case which had been treated by his friend Mr. Price. In this instance the patella was similarly affected, and since its removal the patient had been freed from former annoyance. It was sometimes thought that although the ends of the bone remained united merely by soft material for some time, that osseous consolidation would not ultimately follow. This was a very serious error to fall into; for an admirable illustration of patience and good management was evinced in the case of a patient now in the house, and who had come back to exhibit himself to Mr. Partridge, who performed the operation. In this instance the most pleasing result followed; for the man was now able to walk about without the assistance of stick or crutch, and to renew his ordinary occupations. Mr. Fergusson then alluded to the various notions that were entertained by some surgeons with regard to the "bringing about of anchylosis." For his own part he was ignorant of any plan whereby the surgeon could forward so desirable a proceeding; and he believed that the good result which sometimes followed in old-standing disease of the joints was entirely due to nature, and that far too frequently the surgeon had claimed an amount of ingenuity he did not possess.

The result of this operation will be watched with considerable interest.—*Lancet*, Feb. 27, 1858.

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Excision of the Head of the Femur.—Mr. Coote has at present under his care in St. Bartholomew's a case which promises to do very well after the resection of the head of the femur. The patient is a lad, aged 16, in poor health. The disease was of two years' duration, and the head of the bone was dislocated on to the edge of the great sacro ischiatic notch. The distortion was great, and there was much suppuration from the open sinuses. The resection was performed in the usual manner, the bone being cut through just below the base of the great trochanter. The lad's health has since much improved, and the wound is already almost healed.—*Med. Times and Gaz.*, Feb. 20, 1858.

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Excision of the Elbow-Joint. Three Inches of the Humerus removed for Caries.—The subject of the above mentioned operation is an East Indian, about thirty years of age, and who is under Mr. Tudor's care in the *Dreadnought* Hospital-ship. The symptoms locally were those ordinarily seen in cases of disease of the elbow-joint in which the ends of the bone have been denuded of cartilage by ulceration—viz., sinuses leading from the joint, and crepitus on motion. For the relief of these symptoms, Mr. Tudor excised the ends of the bones. The humerus was found not only diseased at its articulating extremity, but carious disease extended up the inner condyloid ridge to the extent of three inches; and in order to get rid of this, the end of the shaft of the humerus was removed to the extent of three inches and a quarter. The end of the ulna was removed at a point one inch below the coronoid process, and the radius was sawn through immediately above the insertion of the biceps muscle. Thus it will be seen that an "hiatus" of four inches and a quarter was made between the ends of the humerus, ulna, and radius. Yet the result is very satisfactory, for now, not quite four months since the operation, the ends of the bones are so nearly approximated by the contraction of the muscles and by mechanical appliances in the shape of splints and bandages, that the forearm can, to a certain extent, be flexed upon the arm. This action, of course voluntary on the part of the patient and unaided by any one else, consists of two steps; first, the drawing up of the radius and ulna to the end of the humerus, to obtain a fulcrum for the second step, or that of raising the hand and forearm. From the present condition of the parts,

there is every reason to expect a very successful result.

The sluggish system of this individual, and the retarding effect of an attack of erysipelas, justify the expectation of a more rapid and successful result in a vigorous subject.—*Lancet*, Feb. 20, 1858.

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Excision of the Elbow-Joint in a Child.—A case under care in Guy's Hospital, in which Mr. Cooper Forster performed excision of the elbow-joint in July last, has afforded a good example of the value of that operation. There were those who at the time expressed a strong opinion that amputation ought to have been preferred. The patient was a little boy, of ten years old, very delicate and strumous. The disease was of four years' duration, and the whole elbow was greatly swollen, there being many large sinuses and much ulceration. His health was rapidly failing, and amputation would have been quite justifiable. The excision was a complete one; the H incision was adopted, and the extremities of the three bones freely sawn away. The bones were found carious, and wholly denuded of cartilage. The case did uninterruptedly well afterwards, the parts healed soundly, the lad regained his health, and enjoys good motion in the false joint which has resulted. —*Ibid.*

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Sternal Abscess and Caries, caused by a Blow from a Cricket-Ball.—A most singular accident produced an equally curiously-situated injury. A young man, when playing at cricket four years ago, was struck by a ball just at the centre of his sternum. This was followed by inflammation and abscess, subsequent caries, and the presence of a sinus ever since, constantly discharging a little matter. He was admitted into King's College Hospital; and on the 16th of January Mr. Fergusson laid bare the diseased bone, and gouged away all the affected portions. In doing this it showed the seat of the primary abscess, which formed a distinct cavity, situated in the middle of the thickness of the bone itself. It was a most fortunate circumstance that the abscess did not extend behind the sternum, as very serious mischief might have resulted. Operations upon the sternum are sometimes attended with risk; it did not prove so in the present instance, for the young man is making a good recovery. We have sometimes seen large portions of the sternum removed for caries, and were truly glad when the operation has been concluded without danger, particularly when we have reflected upon the important parts in the neighbourhood of the bone, such as the pericardium behind, the pleura, and internal mammary artery at the sides, and the large vessels at the upper part of the mediastinum. We remember on one occasion seeing a portion of a carious rib removed, when the instrument used slipped and entered the patient's chest, ultimately producing a fatal result.—*Lancet*, Feb. 6, 1858.

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Diagnosis of Throat Hæmoptysis.—The following notes on the characteristics of throat hæmoptysis as distinct from that attending pulmonary disease, are the memoranda of a conversation on the subject in the out-patient's room of the City Hospital for Chest Diseases. They may possibly interest some of our readers. When blood comes from the throat, *a*, it is always in very small quantity—*b*, it is never mixed with small air-bells—*c*, it generally occurs as streaks in mucus—*d*, almost always follows a fit of coughing—*e*, is of most frequent occurrence early in the morning—*f*, the patient often complains of having a dry throat on waking. When the hæmoptysis is spontaneous, or when it amounts in quantity to anything near a teaspoonful, it is almost always pulmonary.—*Med. Times and Gaz.*, Feb. 6.

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Spontaneous Absorption of Congenital Double Cataract.—A case of congenital double cataract is now in attendance at the Birmingham Eye Infirmary, wherein vision has been restored in both eyes by the rapid absorption of the lenses, without the agency of an operation, or the occurrence of any accident that could rupture the capsules. The patient, an infant at the breast, when placed under the care of Mr. Solomon a month ago (January 9), was quite blind. The only treatment employed since its birth has been atrophine drops to the eyes, and the administration once every day of a powder composed as follows: ℞.—Hyd. c. cretâ, pulv. Doveri, sacchari albi, ää gr. j; ft. pulvis. On some future occasion full details of this interesting case will be published. The present very brief notice of it is now inserted in the hope that any one who has met with a parallel instance may

be induced to communicate it to the profession.—*Med. Times and Gaz.*, Feb. 20, 1858.

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Sudden Failure of Sight during Lactation—Ophthalmoscopic Examination.—Cases of functional amaurosis in connection with asthenia lactantium are not very infrequent. Feeble mothers not rarely are compelled by the threatened loss of eyesight to desist from suckling. In these usually both eyes are affected. There have commonly been premonitory symptoms, such as muscæ, and with the restoration of health the affection is mostly in a good degree recovered from. Quite distinct from these, though acknowledging the same cause, are certain cases of far greater infrequency, in which, during lactation, usually soon after delivery, the sight of one eye is suddenly and permanently lost. On Tuesday last a woman, aged 26, presented herself amongst Mr. CRITCHETT's out-patients at the Moorfields Hospital, affording a good example of the latter. She stated that she was now within two months of her confinement, and that having lost the sight of one eye after a former one, she was anxious for advice as to any precautionary measures, and more especially as to whether or not she ought to again attempt to nurse her infant. She was very tall, and though of florid complexion, yet of much delicacy of aspect. It appeared that after her second confinement, in January of last year, she had been very weakly indeed. Suddenly, one morning during the seventh week, she found that she had lost the sight of the right eye. For more than a week she was totally blind with it, but afterwards a slow improvement took place, and she is now able to perceive large objects dimly. Her medical attendant insisted upon the infant being weaned when the amaurosis was discovered, and she gradually afterwards regained her health. There had never been any pain in the eyeball, and the other eye had always retained its function perfectly. On hearing this history Mr. Critchett observed, that in this class of cases, according to his experience, the cause of the failure of sight was almost always extravasation of blood either on or behind the retina. He had seen numerous examples of its occurrence soon after delivery or during an exhausting lactation. In the present case the unassisted eye could discover nothing in the affected organ different from its fellow. The pupil was sound and mobile, and the globe had a normal degree of tension. Atropine having been used, the pupil dilated to a large size, with some little improvement in sight. With the ophthalmoscope it was seen that a filmy coloured membrane of considerable size floated in the lower half of the eye, at a little distance from the retinal surface. Only one half of the entrance of the optic nerve could be seen, the other being covered from view by a crescentic patch of what was probably extravasated blood. The condition thus closely coincided with what has been expected. The woman was of course advised not to think of nursing again, and also that after her expected delivery the greatest attention should be paid to the speedy restoration of strength by the early use of liberal diet, etc. The theory of the connection between general debility and loss of nervous function is much more easily given than that of that between debility and the local extravasation of blood. Why such extravasation should occur by preference in the eye is also not very easily explained. The clinical fact, however, seems well established. Such cases are of course from the first hopeless as to complete cure, though, as the above proves, a certain degree of improvement may not unfrequently result. —*Med. Times and Gaz.*, Jan. 30, 1858.

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Modified Operation for Epiphora.—After slitting up the lachrymal canals for the relief of epiphora (the method introduced by Mr. Bowman, and now so generally adopted), it now and then happens that only an incomplete result is obtained. Although a gutter for the tears of a quarter of an inch in length has been obtained, yet they do not wholly find their way into it, and the overflow still occurs during sudden increases of secretion. Mr. Critchett suggests that this is sometimes due to the two sides of the canal falling together too closely, and has proposed to remedy it by cutting the inner one wholly away. This is easily effected by means of small curved scissors. A case now under care, the only one, we believe, in which the proposal has been carried out fully, confirms the expectations of benefit. The canal had been freely slit up some weeks before, and no union of its margin had followed, but still the tears occasionally ran over the cheek. The carunele was large, and filled up the hollow which should naturally exist at the inner angle of the lids, and also some-

what tilted the lid outwards. Mr. Critchett cut away the inner wall of the canal, removing an elliptical piece of mucous membrane, about a quarter of an inch long and an eighth broad in its middle. A little cup has now been formed in which the tears collect, and the apex of which is the nasal extremity of the canal itself. The liability to epiphora has as yet been wholly remedied. Mr. Critchett remarked the other day respecting these cases that he was convinced that an enlarged condition of the caruncle, pushing the lower lid with its punctum outwards, was not unfrequently a cause of epiphora, and suggested that the right practice might in such cases be to snip away part of that body, and thus draw the lid back into the proper position.—*Med. Times and Gaz.*, Feb. 6, 1858.

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Division of the Tear Punctum and its Canals.—For the performance of this little operation, Mr. SOLOMON has laid aside the knife and director, and substituted a pair of Maunoir's scissors, that have narrow blades and sharp points. The advantages of this change are—he finds great facility and rapidity of execution, a matter of moment in nervous patients; the slit is always perpendicular; it never re-unites, and the sides of the canal remain well everted. The greatest width of the blades of the scissors he makes use of is one-sixth of an inch, their length from rivet to point half an inch. Having first explored the canal with a probe to ascertain if it is strictured, and what its direction may be relatively to the margin of the lid and the caruncle, the operator, bearing in mind the anatomical arrangement of the parts, enters the punctum, while the lid is on the stretch, with the point of the lower blade of the scissors, and then slightly depressing the handle, slides the blade along the canal as far as the caruncle, where he pushes the point through the conjunctiva, and cuts out. If the punctum is constricted a common pin is used as a dilator before the introduction of the scissors. In the preceding description the lower canal is supposed to be the one selected for the treatment, though this method is also applicable to the upper.—*Med. Times and Gaz.*, Feb. 20, 1858.

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Clinical Lecture on Hemiplegia dependent on Atrophic Cerebral Softening. By R. B. TODD, M. D. (Delivered at King's College Hospital.)—The best instance of disease which I can to day bring under your notice is that of a woman named Mary Anne Godfrey, who is now lying in Ward No. 7, with hemiplegia of the right side. She tells us she is 34 years of age, and that this is the second time she has been in the Hospital, for she was here under my care with hemiplegia of the *left* side about five years ago. Upon looking over my case-books I find that this statement of hers is quite correct, and I have here the notes which were taken of her case when she first came under my observation.

The special interest of the case consists in the fact of her having been twice the subject of very complete hemiplegic paralysis; and having completely recovered from the first attack, she now, after the lapse of so long a period as five years, suffers a second attack on the opposite side.

The date of her former admission was May 21, 1850, and she was then 29 years of age. It appears that her health generally had been good until December, 1849, when she had an attack of rheumatic fever, for which she was uder treatment in a metropolitan hospital. Ever since that time she has been more or less subject to rheumatic pains. It is not at all improbable that during this first attack of rheumatism there may have been some endocardial affection, for we found then and still find upon examination that a bellows-sound, accompanying the systole, is audible over the base of the heart and the region of the aorta.

In January, 1850, a month after the rheumatic fever, she had a fit apparently epileptic, and came out of it in two hours with the full use of her limbs. In March of the same year she had a second similar seizure, which lasted two hours, and on coming out of it she found her left arm paralyzed and her face awry, but these effects disappeared in half an hour. Three weeks subsequently she had a third attack, also followed by transient paralysis of the left side. From this time she continued well until the morning of May 17th, when she awoke, after a heavy sleep, with *complete* hemiplegia of the left side. In this state she was brought to the Hospital four days after the attack. Here she was at once placed under a supporting plan of treatment, the administration of quinine and iron, and an occasional purgative, together with a nutritious diet; in six

weeks she perfectly recovered the use of her limbs, and left the Hospital quite well.

The history of the attack for which she has now been admitted into the Hospital is this: On the evening of November 6th, 1855, while walking in the street, she suddenly fell down in a state of insensibility; she was taken up and carried home, and it was then discovered that she was paralyzed on the right side of her body. She remained insensible all night, and the following morning was cupped on the back of the neck. And here let me remark that I hope to see the day when this practice of abstracting blood as a matter of routine (for it is really nothing more than this) in cases of sudden paralysis will be abandoned; undoubtedly it is daily becoming less frequent. Many men, when summoned to a case of sudden palsy, whether with or without loss of consciousness, either cannot or will not take the trouble to investigate the case thoroughly, and the only conclusion at which they seem able to arrive is that the symptoms in some way or other depend upon *congestion of the brain*, that there is too much blood in the head; and, therefore, that bleeding must be resorted to, whether from the arm, or by applying leeches to the head, or cupping on the back of the neck.

But to return to our case. In the course of the evening the patient recovered her consciousness, and this fact, in the opinion of many, would be a sufficient justification for the bleeding. But although she recovered her consciousness, the paralysis continued, and her power of articulation was considerably impaired, while vision and hearing were also somewhat affected. For the following two or three days she was rather feverish, but neither subsequently to nor during the attack were her limbs at all drawn up, nor was she in the least degree convulsed. The catamenia were quite regular; and there was nothing in her history to justify a suspicion of a syphilitic taint.

On the admission of this patient there was complete paralysis, as regards voluntary motion, of the muscles of the right side of the body; indeed, it is rare to meet with a case of hemiplegia more complete than this had been, for no reflex actions could be induced by tickling the sole of the foot, except occasionally, when we succeeded in exciting a slight action in one or two muscles connected with the great toe. The muscles of the paralyzed limbs were all perfectly flaccid and relaxed; the mouth was slightly drawn to the left side; the tongue, when protruded, diverged somewhat towards the right side; the patient could see and hear well; the pupils were equal; there was no headache, but, as I before mentioned, a systolic bellows-sound was audible over the base of the heart.

Let me impress upon you the importance of observing and noting in your record in all cases of hemiplegia the condition of the muscles of the paralyzed limbs. You should always flex the forearm upon the arm, and the leg upon the thigh, and carefully ascertain whether any of the muscles of these parts offer any resistance to these movements; and if they do, you should note the degree of this resistance—whether it be merely a slight resistance, or whether it amount to a state of greater or less rigidity. Sometimes you will find that the biceps is the only muscle which at all opposes your movements, and in other cases it is the triceps alone which resists; while in other cases you will find all the muscles of the limb in a state of intense rigidity. You will readily understand the great importance of attending to these points when I tell you that these different states of the paralyzed muscles—flaccidity, slight resistance, or absolute rigidity—are indications of different states of brain. Thus the perfectly flaccid condition of the muscles of the palsied limbs is indicative of a cerebral lesion distinctly atrophic in its nature—a lesion the very opposite of inflammatory, of a low kind, and one in which there is a tendency to waste, and in which the vital powers are *below par*.

The resistive state of the paralyzed muscles shows that the cerebral lesion, whatever it be, is of an *irritative* kind. A very frequent cause of this state of muscles is a small apoplectic clot with laceration by the effused blood of some of the healthy brain-substance immediately adjoining it. When the palsied muscles are hard and rigid, and almost in a tetanic condition, the brain lesion is of a more distinctly and decidedly irritative kind than in the last-mentioned class of cases, in which there is merely simple resistance, and is sometimes of an inflammatory nature. These are the cases best adapted for bleeding, or, at all events, for mercury. But when there is merely resistance of the paralyzed muscles, and, *à fortiori*, when they are perfectly flaccid, these

remedies are inadmissible and generally calculated to do harm.

Here, then, we have in the case before us all the indications of paralysis dependent on an atrophic lesion of the brain—all the characters, in fact, of an ordinary case of a common form of hemiplegia, but a form which is more frequently met with in persons more advanced in life than our patient. I omitted to mention that sensibility was considerably diminished in the paralyzed limbs after the attack, and (what is not very common) it has since exhibited no decided tendency towards a speedy return. If you converse with this patient you will perceive that, although she is in a low and depressed state, which is partly perhaps due to the shock of the attack, and partly also to an enfeebled and impaired health prior to the seizure, her intellectual powers are pretty perfect; and I therefore infer that her hemispherical convolutions are not damaged.

The lesion in this patient is *atrophic* or *white softening*, and its seat is, I believe, some part of the *centre of volition*—that part of the brain which is immediately concerned in voluntary actions, *i. e.*, the corpus striatum and optic thalamus on the left side, or parts in immediate connection with these ganglia. According to the view which I take of the physiology of the brain, I am led to regard these two great nervous masses—the corpus striatum and optic thalamus—as connected with the centres of volition and sensation respectively, much in the manner in which the capital of a pillar is connected with its column; and hence it is that lesion of the former gives rise for the most part to paralysis of voluntary motion, while sensation is chiefly impaired when the latter is the part most involved in disease. Still, however, it should always be borne in mind that lesion of either of these cerebral ganglia produces symptoms very similar to those caused by disease of the other. That the paralysis of motion, which is thus induced, should be on the opposite side of the body, may appear inconsistent with the view which I take of the different functions of these ganglia as separate centres, but this inconsistency is only apparent, and is entirely removed, I think, when we bear in mind the exceedingly intimate connection which exists between these two great masses of nervous matter, and when we remember how they lie imbedded the one in the other; so much so that it is very difficult to imagine lesion of the one without some affection of the functions of the other. But inasmuch as the optic thalamus is by far the larger of the two centres, and inasmuch, also, as it has much more extensive connections with surrounding parts than the corpus striatum, so its function—common sensation—escapes far more frequently than the function of the corpus striatum—voluntary motion; and it is much more common to meet with cases in which the function of the corpus striatum is influenced by lesion of the optic thalamus, than those in which the function of the optic thalamus is interfered with, in consequence of a diseased condition of the corpus striatum. The explanation of this fact is, as it appears to me, to be found in the immense connections of the thalamus with the corpora quadrigemina, pons Variolii, etc.—in a word, with the mesocephale. In consequence of the great size and extensive connections of the optic thalamus, it requires a very large lesion of this body to affect sensibility materially; hence, then, whenever I find in a case of hemiplegia that sensation is *much* and *permanently* impaired, I am disposed to think, *cæteris paribus*, that the brain-lesion is considerable, and that it involves a pretty large portion of the optic thalamus with perhaps, also, some part of the corpus striatum.

But in the majority of cases of hemiplegia the paralysis is of *motion only*, although in most there is more or less numbness of the palsied limbs immediately after the attack. This latter symptom generally passes off in the course of a few days, or even hours, and the sensibility becomes perfectly restored, while voluntary motion remains more or less completely paralyzed; and in such the lesion is chiefly of the corpus striatum, or of parts in its immediate vicinity, the optic thalamus either entirely, or almost entirely escaping. From the completeness of the paralysis of voluntary motion, and even of reflex actions in our patient upstairs, together with the great degree of impairment of sensibility, I am inclined to think that the lesion in this case is very extensive, and that it is, as I before said, of an atrophic character—white softening.

Now white softening depends for the most part upon any condition which cuts off from the brain, or from a part of the brain, the normal supply of blood. This has now been proved by many cases in which ligatures have been placed for surgical purposes

upon the common carotid artery, and in which the operation has been speedily followed by hemiplegia of the opposite side. I witnessed a case of this kind, in which, two days after the application of the ligature, the patient was suddenly seized with hemiplegia of the opposite side, without any loss of consciousness whatever, and in which the post-mortem examination showed a state of white softening of the cerebral hemisphere of the same side as that of the carotid tied. I myself put on record some years ago a case in which hemiplegia resulted from a state of white softening dependent upon defective blood supply, which I believe is perfectly unique; and, although I have many times tried to bring about this pathological condition by tying the carotids of the lower animals, I have never met with decided success; but in the case to which I am now alluding the experiment was already performed for us by what one may almost designate a *freak of disease*. The case was one of dissecting aneurism; through a slit in the aorta blood in considerable quantity forced its way, by splitting up the coats of this vessel along the innominata, and for about an inch and a half up the right common carotid, where it coagulated, and thus formed a plug, which completely obliterated the cavity of the artery (carotid); I should add, that the dissected condition of the coats extended downwards along the arch and abdominal aorta in the belly, to the renal artery. When the accident occurred the patient fainted, but he recovered after a little time, under the application of the usual restoratives; and I saw him the same evening, and also the following day, and was greatly puzzled to tell what was the nature of the case; for the principal symptom was pain, referred to the back and the chest. But two days after the accident the patient suddenly became hemiplegic on the left side, without in the least degree losing his consciousness; and the characters of the palsy were precisely those of our patient upstairs, the paralyzed muscles being perfectly flaccid and relaxed. He continued, however, to live on for eleven days, a very unusual thing in a case of dissecting aneurism, and then death took place, the coats of the first portion of the aorta having given way, and allowed blood to escape into and distend the pericardial sac. When we came to examine the body, we found a state of white softening in all those parts of the right hemisphere of the brain which are supplied with blood by the anterior cerebral artery, which, as you know, supplies the whole substance of the hemisphere. I may here observe, that the chief reason why I have been unable to produce this condition in the lower animals by tying the common carotid artery is that their brains receive their chief supply of blood from the vertebrals, which appears to be even sufficient to keep up its nutrition, when both carotids are perfectly obliterated.

The state of white softening of the brain occurs chiefly in persons advanced in life—from fifty to eighty years of age, and upwards. In these patients it appears to depend upon a gradual change which takes place, to a greater or less degree, in the coats of all the arteries in the body, but especially in those of the brain. This change, which is known generally under the term *atheroma*, consists in the deposition of earthy and fatty matter in the walls of the vessels, causing a degeneration of their tunics. Sometimes the deposits are confined to the larger vessels; sometimes the capillaries are diseased, and their muscular fibres have undergone fatty degeneration, as was first pointed out by Mr. Paget. The effect of these deposits is, that the capillary circulation throughout the brain becomes more or less impeded, being most so when there is most disease of the vessels. The brain substance, gradually becoming less and less perfectly nourished, passes into a softened state, and at length melts down. The solution of continuity of nerve fibres which thus occurs results in the effectual cutting off of all communication between the centre of volition and the opposite half of the body, and induces a state of hemiplegia. It is precisely this process which, I believe, has taken place in the subject of our remarks to-day. If, then, the malady be due to a diseased state of the arterial system, and especially to a fatty condition of the cerebral capillaries, the walls of which have scarcely strength enough left to retain the blood within them, it is quite clear that the lesion is essentially of an atrophic nature, and in no way due to any overflow of blood to the brain. And it is in cases of this kind that true apoplexy most frequently occurs—that is to say, in which blood in greater or less quantity becomes effused into the brain—and the blood thus poured out often ploughs up the sur-

rounding nervous substance, so as to form a considerable cavity, in which the clot is contained.

How do we distinguish this apoplectic condition from simple softening? and how do we know that in the case of our patient, Mary Anne Godfrey, true apoplexy has not occurred? The reason why I say there is no effusion of blood in this case is, because a very small clot will almost invariably induce more or less of a comatose condition. A clot no larger than the end of one's little finger will generally give rise to a lethargic condition at least, if not to perfect coma; and this will usually be accompanied with more or less of snoring. When hemiplegia is dependent on a state of simple white softening, though the patient may for some time after the stroke be for a brief period unconscious, lethargic, and inclined to gape, yet there will be no prolonged loss of consciousness, and the intellect will generally recover itself perfectly—this last depending partly on the normal nutrition of the greatest portion of the affected hemisphere, and partly upon the healthy state of the opposite hemisphere.

Again (and here, in consequence of want of time, I must speak rather dogmatically, although these conclusions, I should tell you, are drawn from close clinical observation, together with the results of numerous post-mortem examinations), if blood be effused into the brain, provided it encroaches on and more or less lacerates healthy brain, then there will be more or less resistance or rigidity of the palsied muscles, while if the clot be large the symptoms of coma will be very decided and prolonged; the patient will lie in a heavy sleep, from which he can be roused only with great difficulty, or, perhaps, not at all. On the other hand, when you come to the bed of a patient labouring under hemiplegia from simple white softening, you will find him, generally speaking, able to answer questions readily and rationally, although, in some cases his speech may be "thick," according to the extent to which certain muscles of articulation and deglutition may have been affected, or to which the centre of emotion may have been involved, either by shock or actual disease. We conclude, therefore, that the hemiplegia in the woman upstairs depends upon an atrophic softening (white softening) of certain central parts in the left half of the brain.

The history of this patient affords confirmation to this diagnosis. There is an account of her having had two or three epileptic fits prior to the first attack, and it is not improbable that both it and the second attack were real epileptic fits, so that it is very likely that the hemiplegia, or rather the white softening upon which it depends, may be associated with the conditions which give rise to the epileptic paroxysms.

Taking then this view of the nature of the case, what treatment did we pursue? You have heard the remedies which were employed prior to the patient's admission into the Hospital; and you will now, perhaps, not be surprised to learn that the plan which we adopted was precisely the reverse of this. A general supporting plan of treatment was resorted to; at first ammonia and chloric ether were exhibited every four hours, and with these a little wine was given; and during the last few days the patient has been taking quinine. Now, if the hemiplegia depended upon any hyperæmic or plethoric condition, upon a too highly nourished state of brain, or upon the presence of too much blood within the cranium, no measures would, probably, have been productive of greater harm than those to which we have had recourse; but on the contrary, our patient is slowly and gradually improving; slight reflex actions are now capable of being excited in the paralyzed leg, and this limb will, doubtless, be the first which will recover itself, after which the palsy will disappear from the face and tongue, and lastly from the arm, for this is the order in which the recovery of paralyzed limbs generally occurs.

I may here state that when this woman was in the Hospital in 1850, for a similar attack of hemiplegia, the paralysis was on the *left* side, whereas it is now on the *right* side; and the treatment upon which she was then placed was exactly like the course which is now being pursued.

She left the Hospital then, perfectly well, and continued so, with the exception of her being almost constantly subject, in a greater or less degree, to rheumatic pains until the present attack.

It often happens in cases of hemiplegia dependent on white softening, that the patient recovers perfectly from the first attack, and, after a longer or shorter interval, gets another stroke of palsy; and this second seizure is rarely on the same side as the

first. The reason of this appears to be, that the affection depends upon a diseased state of the bloodvessels, and that this last morbid condition is the result of a symmetrical process, affecting both sides of the brain alike, but as it does not generally proceed exactly *pari passu* on the two sides, it is usually found in a slightly more advanced stage on one than on the other. This is a most interesting pathological fact, as it well explains the point in the clinical history of those cases to which I have just adverted.

Some of you may ask, How does recovery take place in these cases, and what changes occur then in the softened parts of the brain? It is impossible, in the present state of knowledge, to speak upon this subject otherwise than speculatively. As regards the fatty and earthy degeneration of the coats of the bloodvessels, upon which depends the defective blood-supply which so often immediately induces the state of white softening, this, I should imagine, is a morbid condition which never recovers itself; but although this is probably the case, still as the softening is generally due directly, as just said, to some stoppage of the circulation in the brain, to the plugging, or the obliteration by some means of some vessel, so it appears reasonable to suppose that in the cases of recovery a collateral circulation is established sufficient to restore and maintain the normal nutrition of the softened brain; just as occurs when the main artery of a limb is tied for surgical purposes. This appears to me to be the most reasonable explanation of these phenomena, the correctness of which further observation must determine; however this may be, I feel satisfied from clinical observation that this simple white softening is capable of being repaired. But in very many cases the process of repair does not take place, the brain-fibres remain inadequately nourished, and so the case proceeds from bad to worse; the paralysis never recovers itself, the temperature of the palsied limbs falls below the normal standard, and the paralyzed parts suffer in their capillary circulation, and often in consequence become œdematous. It is not very uncommon to see patients suffering from paralysis dependent on an atrophic condition of the nervous centres, whose palsied limbs are perfectly dropsical, although there may be no œdema of any other part of the body.

It is quite unreasonable, therefore, to think of treating such cases as that of our patient upon any other than a supporting plan. What you should do is to endeavour to improve the condition of the blood, and uphold the strength of your patient in every way that his digestive power will permit. If you do this you need not look upon these cases as hopeless, as used frequently to be done in former years; for upon this plan you will often find that these patients will go on for months, or even years. You see the practice which I almost invariably pursue, and many of you well know that it is a very rare thing for us to get a post-mortem inspection in these cases, as, unfortunately for our scientific researches, these patients won't die. Although we do not effect more cures now than formerly, certainly our patients live longer, and we generally send them out of the Hospital in a comparatively much improved condition; and this, I sincerely believe, is mainly, if not entirely, due to our adopting a supporting plan of treatment. —*Med. Times and Gaz.*, Feb. 6, 1858.

MEDICAL NEWS.

DOMESTIC INTELLIGENCE.

Quarantine and Sanitary Convention.—The Board of Commissioners appointed at the meeting of last May, and consisting of the officers and one delegate from each of the States represented in the Convention, met, at the invitation of the President of the Convention, in the Hall of the College of Physicians of Philadelphia, February 4, 1858, to provide for the assembling of a second convention this year.

The necessary arrangements for the call of the Convention were committed to an Executive Committee, consisting of Drs. Kemp and Steiner, of Baltimore, and Drs. Jewell, E. Hartshorne, and Biddle, of Philadelphia. These gentlemen were authorized to issue a circular, inviting delegates from the Municipal Corporations, Chambers of Commerce, Boards of Trade, Boards of Health, and two Medical Societies, in each of the seaboard cities of the Union, to assemble in Baltimore on Thursday, the 29th of April ensuing, at 10 o'clock A. M. They were requested also to solicit scientific contributions or papers on subjects connected with quarantine, to be read to the Convention. Copies of this circular have been received in this city by the College of Physi-

cians and the Philadelphia County Medical Society.

The following delegates have been appointed by the College of Physicians: Drs. R. La Roche, D. F. Condie, John Bell, G. Emerson, E. Hartshorne, W. Jewell.

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Philadelphia College of Physicians.—At a stated meeting of the College of Physicians of Philadelphia, held March 3, 1858, the following Fellows were elected delegates to the next meeting of the American Medical Association, to be held in May, 1858, at Washington:—

Drs. Geo. B. Wood, Joseph Carson, Isaac Hays, Caspar Wister, Francis West, W. S. W. Ruschenberger, Geo. W. Norris, John B. Biddle, Thos. F. Betton, Lewis Rodman, J. Rodman Paul, S. L. Hollingsworth, Samuel Lewis.

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University of Maryland—Medical Department.—The following changes have recently been made in the Faculty of this school. Prof. R. H. Thomas has, in consequence of protracted ill health, resigned the chair of Obstetrics. Dr. Geo. W. Mittenberger, Professor of Materia Medica and Therapeutics, has been transferred to the chair of Obstetrics, and Charles Frick, M.D., has been elected to the Professorship of Materia Medica and Therapeutics. Dr. Frick is extensively known by his various valuable contributions to our science, and his accession will add materially to the strength of the school.

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North Mississippi Medical Society.—The first public annual meeting of this Society was held in Aberdeen on the 18th December, 1857. The annual address was delivered by Dr. G. S. Bryant, of Aberdeen. Officers for the present year:—

President.—G. S. Bryant, M. D.

Recording Secretary.—J. T. Lowe, M.D.

Corresponding Secretary.—R. H. Dalton, M. D.

The Society is in a flourishing condition.

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Medical Graduates in 1858.

University of Pennsylvania	145
College of Physicians and Surgeons (N. Y.)	53
Medical Department of Yale College	6
Massachusetts Medical College (Boston)	16
Medical College of Georgia	61
Jefferson Medical College	209
Pennsylvania Medical College	35
New York Medical College	33
Starling Medical College	10
Oglethorpe Medical College	11
University of the City of New York	127

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Consolidation.—The *Peninsular Journal of Medicine* and the *Medical Independent*, have been consolidated under the title of the *Peninsular Journal and Medical Independent*. This consolidated journal is to be under the editorial direction of Profs. Gunn and Palmer, who are to have associated with them Mr. Stearnes as pharmaceutical editor.

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Microscopes.—Messrs. J. and W. Grunow & Co., of New Haven, Conn., have published an "Illustrated Scientific and Descriptive Catalogue of Achromatic Microscopes," manufactured by them, to which we invite the attention of the profession. A microscope is now essential to the medical student and scientific practitioner.

FOREIGN INTELLIGENCE.

Death from Chloroform.—An inquest was lately held at the Bristol Infirmary (says the local *Gazette*), before the coroner, Mr. J. B. Grindon, on the body of William Powell. It appeared from the evidence that the deceased was about forty-nine years of age, and a cooper by trade. On the 9th inst. he was admitted into the Infirmary, suffering at the time from a disease of the elbow-joint, occasioned by a fall received some two years before. The bones of the joint were so diseased that it was deemed necessary an operation should be performed on him. It was intended that the operation should be performed by Mr. Prichard. The medical gentlemen were assembled, and the deceased having expressed a wish to inhale chloroform, he was examined to see if he was in a fit state to take it. No objection to his taking it could be elicited, and a small quantity was therefore administered in the usual manner by Mr. Powell, assistant house-surgeon. In less than three minutes the man was dead. Mr. Powell and Mr. Crisp both deposed that the chloroform was administered in the regular manner, and that the quantity taken was very small. On exa-

mination it was found that the heart of the deceased was naturally very weak. The coroner explained to the jury that though chloroform was administered in tens of thousands of cases with the greatest benefit and success, yet every now and then a case would occur in which, from some peculiarity of constitution, the patient's system was unable to recover from the effects of the inhalation, and death took place. The jury returned a verdict, "that the deceased died from the effects of chloroform, administered to prevent the pain of an intended operation."—*Lancet*, Feb. 27, 1858.

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Citrate of Iron and Strychnia a new Therapeutic Agent.—For a long time back a therapeutic agent of very efficient properties has been used with considerable success at the Royal Free Hospital in cases of dyspepsia of an atonic character by Dr. O'Connor. He has also found it productive of great benefit in similar conditions depending on functional derangement of the uterus. In these cases it acts as an emmenagogue when all other remedies have failed, and it has a powerful effect in tranquillizing the excitement of the nervous system. This preparation is a citrate of iron and strychnia, the dose of which is about three grains three times a day, to be taken immediately after a meal. There is now a case of chorea in the Hospital under the care of Dr. O'Connor, immediately brought on by the patient being frightened by a thunderstorm in August last, since which time she has, without any intermission of the symptoms, been a sufferer. In this case the citrate of iron and strychnia has been only used for a few days, and already with marked benefit. The case is one of interest, and we propose at a future time giving it in detail. The preparation which Dr. O'Connor uses is made by Mr. Bastick, of Brook Street, Grosvenor Square. —*Med. Times and Gaz.*, Feb. 27, 1858.

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Glycerine in Dysentery.—M. Daude, a French provincial practitioner, reports that during a severe epidemic of dysentery he found the employment of glycerine of the greatest utility. He prescribed one ounce of glycerine in five ounces of decoction of linseed, in an injection, repeated twice a day, and two spoonfuls every hour of the following mixture: Glycerine 11 drachms, orange-flower water and water equal parts, so as to make a five ounce mixture.—*Med. Times and Gaz.*, Feb. 27, from *L'Union Méd.*, 1857.

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New Form of Actual Cautery.—M. Bonnafond, who is strongly persuaded of the excellence of the actual cautery as a means of treatment, has endeavoured to obviate some of the inconveniences of its application. To this end he has invented the following caustic, which burns slowly, and admirably replaces the actual cautery when the cauterization is not required to act very deeply, or to be made on a very wet surface. Dissolve five parts of gum tragacanth in a sufficiency of water, facilitating the solution by adding a little sugar, and rendering it as concentrated as possible. Then add gradually fifteen parts of vegetable charcoal, and two of nitrate of potass, and thus form a homogeneous paste capable of being rolled into cylinders of various sizes. These must be well dried, and when wanted for use may be lighted either by a candle or the fire. The eschar is usually detached in five or six days. Latterly, M. Bonnafond has used a mixture of the gum and charcoal without the potass.—*Ibid.*

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Vaccination with a Magnetized Needle.—Prof. Beka states that since 1856 hundreds of children have been thus vaccinated, with scarcely any failures occurring. The point of the needle is well saturated with the magnetic fluid before practising the vaccinations, which are then performed in the usual manner, a single magnetization serving for many vaccinations. It is quite surprising to observe the rapidity with which the vaccine virus is absorbed when the needle is thus prepared.—*Ibid.*, from *Presse Méd. Belge.*

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New Preparation of Superphosphate of Iron and Lime.—Dr. Routh exhibited to the Medical Society of London (Feb. 20, 1858) this new preparation. It was prepared by dissolving phosphate of iron and phosphate of lime, in equal proportions, in hot metaphosphoric acid, and adding sugar to the solution to make a syrup. Some years ago, he had recommended the syrup of the superphosphate of iron (elsewhere known as the biphosphate of iron) as a remedy for weakly children, and those weak adults with mental diseases. Its uses as such had been since amply proved. He now recommended this as an excellent remedy in rickets and weak children with deficient osseous deve-

lopment. It was very pleasant to take, and did not blacken the stools. It was prepared by Mr. Greenish, of New Street, Dorset-Square. Each ounce of the syrup contained five grains of iron and five of phosphate of lime.—*Lancet*, March 6, 1858.

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Epidemics in France.—Typhoid affections prevailed in Paris during great part of 1857. Latterly the nature of the epidemic has completely altered; typhoid fevers have diminished in frequency, lost their epidemic character, and given place to another affection, *the influenza*, which, though less severe in character, is, perhaps, more universal. At the end of the December fogs the influenza suddenly appeared in Paris, and for the past month there is scarcely a house exempt from it; and once it enters a house, it is almost certain to attack every individual in it. If an epidemic of such extent were very fatal, scarcely a third or fourth of the population would survive. Fortunately the epidemic is very mild in its nature, but not so much so as to admit of too great security. It does not consist of a simple bronchitis or coryza, so common at the beginning of winter (and which latterly, by an abuse of the term, have been called *influenza*), but is a true epidemic influenza, such as raged with such great severity in Paris in 1852, before the great epidemic of cholera, and several times since—*i. e.*, a catarrhal fever, characterized chiefly by pain in the back, quick pulse, hot skin, intense headache, incessant persisting sensation of heavy weight in the head, a *saburral* condition of the *primæ viæ;* and, in fine, a complete state of prostration, which is, as it were, the peculiar characteristic or mark of the epidemic. It usually lasts for a week; in some persons only for three or four days, while in others it lasts for twelve days or a fortnight. It usually localizes itself as a bronchitis, sometimes as an angina or a gastritis; but in some cases it assumes a more serious character, and passes into a catarrhal pneumonia which ends fatally. Several cases have proved fatal in this way, in hospital, and it was from this complication that Legendre died. The treatment consists in the use of evacuants. Their administration is almost always followed by a sensible amendment in the general condition, and especially by a diminution of the painful and wearying headache. It brings the bronchitis to a speedy resolution, and anticipates the pulmonary congestion which might follow it. The emetico-cathartic plan is that to be preferred. Fifteen grains of hippo, with three-fourths of a grain of tartar emetic, may be given to an adult. This constitutes the principal part of the treatment, which may be advantageously followed up by the use of pectorals and demulcents, such as are generally useful in such cases.—*Gaz. des Hôp.*, Jan. 16.

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Effects of Fear.—A Parisian physician, during his visits made in a hired fly, had received a bottle of real Jamaica rum as a sample, but found, after returning home, that he had left it in the carriage. He went to the office, and informed the manager that he had left a virulent poison in one of the carriages, and desired him to prevent any of the coachmen from drinking it. Hardly had he got back, when he was summoned, in great haste, to three of these worthies, who were suffering from the most horrible colic, and great was his difficulty in persuading them that they had only stolen some most excellent rum.

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Price of Quinine.—M. Guibourt, in a recent statement he made to the Académie de Médecine, observed that the fears of the failure of the supply of cinchona, which has continued to be predicted for a century, are still exaggerated. One of the largest wholesale druggists in Paris has assured him that the supply of quinine was never more abundant than now, and that, after purchasing it wholesale, and bottling it, he can sell it from 8 francs 40 centimes to 8 francs 80 centimes (according to the quantity bought) per bottle of thirty grammes (℥viiss). The bottle, in 1843, cost 10 francs, and since then has been temporarily raised, especially in time of cholera, to more than double this price, while it has never been lower than now. Compared with other chemical products, however, the price of quinine has not decreased sufficiently. Thus, fifty years ago, the kilogramme of phosphorus, which costs now 9½ francs, cost 200. Ten years ago, chloroform that may now be bought at 12 or 13 francs the kilogramme, cost 150 francs. The sulphuret of carbon, sold in 1838 at 12 francs per oz., now sells at 60 centimes. Sodium, at 1,000 francs the kilog. in 1854, sells at 60 francs; and aluminium has fallen from 1,500 to 300 francs.—*Ibid.*

Velpeau on the Speculum.—*La France Médicale* of the 13th of February, contains some clinical observations made by M. VELPEAU, at the "Charité" Hospital, upon a case of supposed malignant ulceration of the neck of the uterus. In the course of his remarks, the lecturer stated that professional men generally overrated the diagnostic powers of the speculum; and that in nine cases out of twelve, we can very well dispense with it. Both experience and reasoning tend to render the use of the speculum less frequent. This instrument, in fact, teaches us nothing respecting the volume, shape, position, or density of the organ to be examined. The only circumstance which it brings to light is the tint of the cervix, and the knowledge of this tint is often of no use whatever. The finger, M. Velpeau thinks, is far more useful: with it we make out ulcerations, granulations, fungosities, and the consistence of the cervix. Nay, the speculum often leads into errors of diagnosis, and makes us suspect lesions which have no existence. The neck of the uterus, caught by the extremity of the speculum, appears larger than it really is, and the os looks gaping; nor should it remain unmentioned, that a simple fold of the vagina is often mistaken for the cervix, and the caustic is applied where it was not intended to act. M. Velpeau, without rejecting the speculum, wishes, however, that its use may be considerably restricted, and that young practitioners should get accustomed to establish their diagnosis by means of digital examination.—*Lancet*, March 6, 1858.

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Insanity among Prisoners in Penitentiaries.—M. SAUZE has endeavoured to determine the real origin of the cases of insanity which are observed in prisons, and to show that solitary confinement (*l'emprisonnement cellulaire*) exercises no special influence on the production of mental alienation and suicide. M. Ferrus has stated that those who have given special attention to this subject, have declared that only in rare instances have they been able to attribute mental diseases merely to the depression produced by detention. M. Sauze has collected numerous facts which he believes to confirm this statement.

The study of "penitentiary insanity" shows that malefactors and criminals are too often confounded with the insane. M. Ferrus, and all who have made prisons a subject of attentive study, have recognized the facts, that certain criminals show great analogies with insane persons; that a large portion of condemned persons consist of men of imperfect intellect, driven to crime by the faults of their organization; and that most of the cases of insanity met with in prisons are due to antecedent individual predispositions. MM. Lélut and Tardieu have arrived at conclusions altogether favourable to the cellular system. M. Lélut has established the fact that, in prisons conducted under this system, the number of insane is less than in prisons conducted on the old plan. If it is true that the proportion considerably exceeds that met with in a free and honest population, this is due to the circumstance to which reference has just now been made. Dr. Prosper de Pietra-Santa, in a memoir read before the Academy of Medicine, has arrived at a totally different conclusion. He maintains that insanity and suicide are much more frequent in the Mazas prison than in others. But he does not, M. Sauze observes, appear to have taken care to ascertain the interpretation of facts, to scrutinize the antecedents of prisoners, to take into account their individual predispositions, etc. The cellular prison of Mazas—a place for the detention of prisoners in a state of *prevention* only—of necessity furnishes a very bad element of comparison; and it is, *à priori*, conceived that suicides would there be more numerous, and that insane persons would be found there whose mental condition had not been at all understood at the time of their arrest.

M. Sauze, in his capacity of physician to the prison and lunatic asylum at Marseilles, has observed the insane both in prison and up to the end of their treatment in the asylum. He has not only ascertained the existence of insanity, but has sought out its first symptoms, however slight they may have been; and he has arrived at the conclusion that, in the greater number of the cases, the insanity has been anterior to the imprisonment; and that several times persons have been sent to prison who were in need of treatment in asylums.

The cellular prison at Marseilles, of which M. Sauze has been physician two years, is constructed on the model of that of Mazas. The system followed resembles that of the Philadelphia prison. Isolation is rigorously maintained day and night, being accompa-

nied by labour, walking, exercise, and frequent visits. M. Sauze has related at length fifteen cases, of which, however, an analysis is not here given. To these are added twenty-nine cases of imbecility in various degrees, accompanied by malformation of the skull, thus making a proportion of forty-four insane in a population of prisoners which, in two years, has amounted to about 2,400. This proportion at first sight seems large; but in three only of the cases was the insanity first manifested in prison, and even in these three it was possible to demonstrate the existence of numerous predisposing causes dating several years back. Thus M. Sauze finds three insane in 2,400—a proportion very small compared with that found in a free and honest population, which, according to M. Ferrus, gives one in 1,830, and, according to M. Lélut, two in 1,000. The Marseilles Asylum receives an almost equal number of cases of insanity from the house of detention, which is managed under the old *régime*, and from the cellular prison.

M. Sauze does not attempt to deduce absolute conclusions from his statistics, imperfect as they are, and supported by the experience of two years only. His aim has been only to make approximate conclusions, and comparisons which may point out the necessity of further researches into penitentiary insanity. The facts observed by M. Sauze have led only to the general conclusion that the cause of penitentiary madness is to be sought less in imprisonment, whatever its form, than in the nature of the prison population. "In imprisonment as well as in freedom," says M. Ferrus, "almost all individuals attacked with insanity have been predisposed to the disease. A man, in fact, whose faculties are exactly balanced, may, without losing the free exercise of perfect reason, resist the hardest reverses in life, the most touching losses, and even excessive pain. The most prolonged imprisonment leaves his moral sense intact, and his intellect quite clear."

M. Sauze believes that he can conclude from his observations that most prisoners in whom insanity has been observed, were diseased before entering prison, often even before their sentence, and at the time when they committed the crime. In those who have become insane subsequently to imprisonment, numerous predispositions can always be found, whether in a state of imbecility or epilepsy, or in previous attacks of mental alienation, or in a life of privation and misery, of debauch and excesses of all kinds. Insanity in prison may also arise from causes independent of the prison system. Thus, among the cases observed by M. Sauze, were two individuals who attempted suicide, and manifested symptoms of insanity, a short time before the expiration of their punishment: these were Piedmontese deserters, who feared that they would be sent back to their native country, where they had incurred the punishment of death.

Condemned persons may be imprisoned during the commencement of an attack of insanity, during its incubation, or they may have intermittent insanity, and the time of an attack may happen to fall within the period of imprisonment. Here there are so many sources of error.

M. Sauze insists forcibly on the analogies which exist between the insane and a certain proportion of prisoners, who have not a correct notion of good and evil, and who would have a right to the benefit of irresponsibility. Certain individuals are sent by turns to an asylum or to a prison, according to the view taken of their case by the magistrate. M. Sauze has met alternately, in the Marseilles prison and in the asylum for the soldiers of Algeria, men of defective organization, who only leave an asylum to be sent to a prison.

In referring insanity to causes for the most part foreign to imprisonment, M. Sauze does not pretend to deny entire the influence of incarceration. Imprisonment produces a state of depression and melancholy very favourable to the development of insanity. It is true, however, that the sadness generally disappears at the end of some days, and that the culprit becomes habituated to the rigors of the prison regulation. Insufficient food, want of exercise and air, may also act, in the long run, as debilitating causes, like privations of any kind in free life, and may give rise to mental alienation. Insanity may also arise from other diseases characterized by debility and constitutional exhaustion, which prevail in prisons.

M. Sauze sums up his memoir in the following conclusions: 1. The causes of penitentiary madness are generally independent of imprisonment, whatever be the system followed. 2. The insanity is generally anterior to entrance into prison, and even to

condemnation. 3. When developed in prison, it is even then the result sometimes of causes foreign to imprisonment. 4. The greater number of causes of penitentiary madness are inherent in the prisoner and not in the prison. 5. They consist especially in individual predispositions, such as hereditary tendency, imbecility, idiotcy, or epilepsy, previous attacks of insanity, or a life of privation and of debauchery. 6. There are the closest analogies between the insane and a certain class of prisoners, consisting of men of defective organization. 7. A certain portion of the inmates of prisons would be better placed in lunatic asylums. 8. The number of insane persons condemned to prison is considerable. 9. The cases of insanity which are manifested in prisons are not due to the influence of incarceration alone; they are connected with various causes of general debility, especially insufficient diet. — *Annales Médico-Psycologiques*, 1857.

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Improvement of Medical Education in England.—It is stated in an editorial in a late No. (Feb. 20) of the *Medical Times and Gazette*, that there is a movement going on which will probably tend to alter and improve the method of conducting medical education in England. A communication involving propositions to this effect has been made by one to the other of our great Colleges of Physicians and Surgeons. And both of them cordially agree to the principles suggested in it. The College of Surgeons has arrived at the conclusion that the direction in which it has been striving to extend, of late years, the education of the student is unfortunate; that the increased number of courses of lectures which its programme has compelled him to attend has not tended to advance him in a really useful knowledge of his profession, but that, on the contrary, it has caused him to throw himself more than ever into the hands of the grinder. To remedy this evil the College proposes that the courses of lectures at present required from candidates by their Board shall be considerably reduced in number, so that the student may have some little time given him for digesting what he hears, and more opportunity and leisure for making himself more thoroughly acquainted with clinical surgery and practical anatomy. Every one conversant with the baneful effects of the present system of lecturing will be delighted to hear that such a move is going on. How can it be expected from any living brain that it should take in anything but a mere smattering of what it hears, when its owner is forced hour after hour to be changing continually the course of his thoughts, and without a moment's interval to be rushing from one subject to another? We are also greatly pleased to find that the College considers a modification in the present prize system to be necessary, and that in all these particulars the two Colleges go cordially hand in hand. We sincerely congratulate them on this grand step forward. It is another lift of the mind out of the tangles which mediæval times have twisted around its movements.

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Earthquake at Naples. General Bleeding.—A correspondent of the *Times* states that the Neapolitans are in the habit, when anything occurs to shock or terrify them, of getting themselves bled. After the severe recent earthquake at Naples, the barbers and their lancets were in immediate request, and it is estimated that at least 30,000 persons were phlebotomized.

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Arsenic in Paper-Hangings.—Dr. Alfred Swaine Taylor, in his evidence before the Select Committee of the House of Lords, last session, on the Sale of Poisons Bill, after pointing out that arsenic was much used in several manufactures, such as in the manufacture of glass, especially of opal glass, of shot, in the steeping of grain, and in killing the fly in sheep, states that the largest quantity of arsenic used in this country is used in the manufacture of paper for covering walls. He considered it very injurious both to those living in a house papered with this article, as well as to those employed in the manufacture. An instance was published in a medical work of some cases of illness occurring to persons living in a room papered with this paper; and the effects were described as those arising from arsenic. The colour, says Dr. Taylor, is put on very loosely; it contains nearly fifty per cent. of the poison. In addition to the above, Dr. Taylor handed to the Committee an envelop, the green tint on the inside of which he examined, and found to be formed of arsenite of copper. There is also an orange yellow which contains arsenic. — *British Medical Journal*, Jan. 9, 1858.